# STATE OF INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT AUTHORIZATION TO DISCHARGE UNDER THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

In compliance with the provisions of the Federal Water Pollution Control Act, as amended, (33 U.S.C. 1251 et seq., the "Act"), Title 13 of the Indiana Code, and regulations adopted by the Water Pollution Control Board, the Indiana Department of Environmental Management (IDEM) is issuing this permit to the

## **CITY OF HOBART**

hereinafter referred to as "the permittee." The permittee plans to own and/or operate a major municipal wastewater treatment plant located at 37<sup>th</sup> Avenue and Deep River in Hobart, Indiana. The permittee is hereby authorized to discharge from the outfalls identified in Part I of this permit to receiving waters named Deep River in accordance with the effluent limitations, monitoring requirements, and other conditions set forth in the permit.

Effective Date:	·
Expiration Date:	
submit such information and applicate Environmental Management. The applications are supplied to the submit such information and applications are supplied to the submit such information and applicate submit submit such information and applicate submit sub	ion to discharge beyond the date of expiration, the permittee shall ion forms as are required by the Indiana Department of epplication shall be submitted to IDEM at least 180 days prior to the a later date is allowed by the Commissioner in accordance with is permit.
Issued on Management.	, for the Indiana Department of Environmental
	Timothy J. Method Deputy Commissioner

#### TREATMENT FACILITY DESCRIPTION

The applicant proposes to construct a wastewater treatment plant that is a Class IV, 4.8 million gallon per day (MGD) facility with two equalization basins, microscreening and grit removal, extended aeration basins operated in conjunction with membrane filtration, chemical addition for pH and phosphorus control and ultraviolet light disinfection followed by effluent reaeration.

#### PART I

# A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

The permittee is authorized to discharge from the outfall listed below in accordance with the terms and conditions of this permit. The permittee shall take samples and measurements at a location representative of each discharge to determine whether the effluent limitations have been met. Refer to Part I.B of this permit for additional monitoring and reporting requirements.

1. Beginning on the effective date of this permit, the permittee is authorized to discharge from Outfall 001, which is to be located at 41ENorth 33' 21" and 87E West 15' 00". The discharge is subject to the following requirements:

#### TABLE 1

	Quantity or Monthly	Loading Weekly		Quality of Monthly	or Concentration Weekly	on	Monitoring Red Measurement	quirements Sample
Parameter	Average	<u>Average</u>	<u>Units</u>	Average	Average	Units	<u>Frequency</u>	<u>Type</u>
Flow [1]	Report	Report	MGD			-	Daily	24-Hr Total
CBOD <sub>5</sub>	200	300	lbs/day	5	7.5	mg/l	Daily	24-Hr. Comp.
TSS	400	600	lbs/day	10	15	mg/l	Daily	24-Hr. Comp.
Phosphorus [2]				1.0		mg/l	Daily	24-Hr. Comp.
				TABLE	2			
	Quantity or	Loading		Quality o	r Concentration	n	Monitoring Red	quirements
	Monthly	Daily		Monthly	Daily		Measurement	Sample
<u>Parameter</u>	Average	<u>Maximum</u>	Units Aver	age	Maximum	<u>Units</u>	<u>Frequency</u>	Type
Ammonia-Nitrogen	8.0	18.0	lbs/day	0.20	0.45	mg/l	Daily	24-Hr. Comp.
				<b>TABLE</b>	<u>3</u>			
		~	. •			M : : :	D	
	Quality	or Concent	ration			Monitoring	Requirements	

Average Units

s.u.

Frequency

Daily

<u>Type</u>

Grab

Minimum

6.0

<u>Parameter</u>

pH

Maximum

9.0

Dissolved Oxygen [3]	7.0			mg/l	Daily	6 Grabs/ 24-Hours
E. coli [4]		235	125	count/100ml	Daily	Grab

- [1] Flow measurement is required per 327 IAC 5-2-13. The flow meter(s) shall be calibrated at least once annually.
- [2] In accordance with 327 IAC 5-10-2(b), the facility must produce an effluent containing no more than 1.0 mg/l total phosphorus (P) any month that the average phosphorus level in the raw sewage is greater than 5 mg/l. Otherwise, a degree of reduction, as prescribed below, must be achieved. Such reduction is to be calculated based on monthly average raw and final concentrations.

Phosphorus (P) Level	Required
in Raw Sewage (mg/l)	Removal (%)
greater than or equal to 4	80%
less than 4, greater than or equal to 3	75%
less than 3, greater than or equal to 2	70%
less than 2, greater than or equal to 1	65%
less than 1	60%

[3] The reported daily average concentration of dissolved oxygen in the effluent shall be the arithmetic mean determined by summation of the 6 daily grab sample results and dividing this sum by 6. These samples are to be collected over equal time intervals during the period of operator attendance.

## **Disinfection Requirements**

[4] In accordance with 327 IAC 5-10-6, the effluent shall be disinfected on a continuous basis such that excursions above the *E. coli* standards do not occur from April 1 through October 31, annually. The monthly average *E. coli* value shall be calculated as a geometric mean.

IDEM has specified the following methods as allowable for the detection and enumeration of *Escherichia coli (E. coli)*:

- 1. Coliscan MF® Method
- 2. EPA Method 1103.1 using original m-TEC agar.
- 3. EPA revised Method 1103.1 using modified m-TEC agar.
- 4. *Standard Methods* 20<sup>th</sup> Edition Method 9223 B using Colilert® for use of this procedure, an initial comparison study must be conducted between Colilert® and an approved membrane filtration method. This comparison study must be approved by IDEM before this method can be used by the permittee.

# 2. Minimum Narrative Limitations

At all times the discharge from any and all point sources specified within this permit shall not cause receiving waters:

- a. including the mixing zone, to contain substances, materials, floating debris, oil, scum or other pollutants:
  - (1) that will settle to form putrescent or otherwise objectionable deposits;
  - (2) that are in amounts sufficient to be unsightly or deleterious;
  - (3) that produce color, visible oil sheen, odor, or other conditions in such degree as to create a nuisance;
  - (4) which are in amounts sufficient to be acutely toxic to, or to otherwise severely injure or kill aquatic life, other animals, plants, or humans;
  - (5) which are in concentrations or combinations that will cause or contribute to the growth of aquatic plants or algae to such a degree as to create a nuisance, be unsightly, or otherwise impair the designated uses.
- b. outside the mixing zone, to contain substances in concentrations which on the basis of available scientific data are believed to be sufficient to injure, be chronically toxic to, or be carcinogenic, mutagenic, or teratogenic to humans, animals, aquatic life, or plants.

## 3. Additional Discharge Limitations and Monitoring Requirements

a. Beginning on the effective date of the permit the effluent from Outfall 001 shall be limited and monitored by the permittee as follows:

		Quantity or Loading			Quality	or Concentra	Monitoring Requirements			
		Monthly	Daily		Monthl	y Daily		Measu	rement Sample	
<u>Parameter</u>		Average	Maximu	m <u>Units</u>	Average	Maximum	<u>Units</u>	Frequency	<u>Type</u>	
Mercury [1]		0.000052 0.00	0013	lbs/day	0.0000013	0.0000032	mg/l	See [2] below	Grab	
Copper [1,3]	0.1	0.21	l	lbs/day	0.0025	0.0052	mg/11	X Weekly	24 Hr. Comp.	

[1] The permittee shall measure and report this parameter as <u>total recoverable</u> metal. The following EPA test methods and associated LODs and LOQs are to be used in the analysis of the effluent samples.

<u>Parameter</u>	EPA Method	<u>LOD</u>	<u>LOQ</u>
Copper	220.2	1.0 ug/l	3.2 ug/l
Mercury	1631, Revision E	0.2 ng/l	0.5  ng/l

- [2] Mercury monitoring shall be conducted bi-monthly (i.e. every other month) using EPA Test Method 1631, Revision E. Bi-monthly monitoring shall be conducted in the months of February, April, June, August, October, and December of each year. If EPA Test Method 1631, Revision E is further revised during the term of the permit, the permittee and/or its contract laboratory are required to utilize the most current version of the method immediately after approval by EPA.
- [3] The monthly average water quality based effluent limit (WQBEL) for copper is less than the limit of quantitation (LOQ) as defined below. Compliance with the monthly average limit will be demonstrated if the monthly average effluent level is less than or equal to the monthly average WQBEL. Daily effluent values that are less than the LOQ, used to determine the monthly average effluent levels less than the LOQ, may be assigned a value of zero (0), unless, after considering the number of monitoring results that are greater than the limit of detection (LOD), and applying appropriate statistical techniques, a value other than zero (0) is warranted.

# **CASE-SPECIFIC LOD/LOQ**

The permittee may determine a case-specific LOD or LOQ using the analytical method

specified above, or any other test method which is approved by the Commissioner prior to use. The LOD shall be derived by the procedure specified for method detection limits contained in 40 CFR Part 136, Appendix B, and the LOQ shall be set equal to 3.18 times the LOD. Other methods for deriving the LOQ may be used if first approved by the Commissioner.

## 4. Additional Monitoring Requirements

Beginning on the effective date of this permit, the permittee shall conduct the following monitoring activities:

## a. Influent Monitoring

The permittee shall monitor the influent to its wastewater treatment facility for the following pollutants. Samples shall be representative of the raw influent, prior to mixing with any other wastewater (recycle streams, supernatant return, etc.).

	Quantity or Loading			Quality or Concentration			Monitoring Requirements	
	Monthly	Daily		Monthly	Daily		Measurement	Sample
<u>Parameter</u>	<u>Average</u>	<u>Maximum</u>	<u>Units</u>	<u>Average</u>	<u>Maximum</u>	<u>Units</u>	<u>Frequency</u>	<u>Type</u>
Mercury [1]	Report	Report	lbs/day	Report	Report	mg/l	See [2] below	Grab
Copper	Report	Report	lbs/day	Report	Report	mg/l	1 X Weekly	24-Hr. Comp.

[1] All metals shall be reported as Total Recoverable Metals.

The following EPA test methods and associated LODs and LOQs are to be used in the analysis of the influent samples.

<u>Parameter</u>	EPA Method	<u>LOD</u>	LOQ
Copper	220.2	1.0 ug/l	3.2 ug/l
Mercury	1631, Revision E	0.2 ng/l	0.5  ng/l

[2] Mercury monitoring shall be conducted bi-monthly (i.e. every other month) using EPA Test Method 1631, Revision E. Bi-monthly monitoring shall be conducted in the months of February, April, June, August, October, and December of each year. If EPA Test Method 1631, Revision E is further revised during the term of the permit, the permittee and/or its contract laboratory are required to utilize the most current version of the method immediately after approval by EPA.

## b. Organic Pollutant Monitoring

The permittee shall conduct an annual inventory of organic pollutants (see 40 CFR 423, Appendix A) and shall identify and quantify additional organic compounds which occur in the influent, effluent, and sludge. The analytical report shall be sent to the Compliance

Evaluation Section, Office of Water Quality. This report is due in December of each year. The inventory shall consist of:

## (1) Sampling and Analysis of Influent and Effluent

Sampling shall be conducted on a day when industrial discharges are occurring at normal or maximum levels. The samples shall be 24-hour flow proportional composites, except for volatile organics, which shall be taken by appropriate grab sampling techniques. Analysis for the U.S. EPA organic priority pollutants shall be performed using U.S. EPA methods 624, 625 and 608 in 40 CFR 136, or other equivalent methods approved by U.S. EPA. Equivalent methods must be at least as sensitive and specific as methods 624, 625 and 608.

All samples must be collected, preserved and stored in accordance with 40 CFR 136, Appendix A. Samples for volatile organics must be analyzed within 14 days of collection. Samples for semivolatile organics, PCBs and pesticides must be extracted within 7 days of collection and analyzed within 40 days of extraction. For composite samples, the collection date shall be the date at the end of the daily collection period.

#### (2) <u>Sampling and Analysis of Sludge</u>

Sampling collection, storage, and analysis shall conform to the U.S. EPA recommended procedures equivalent to methods 624, 625 and 608 in 40 CFR 136. Special sampling and/or preservation techniques will be required for those pollutants which deteriorate rapidly.

Sludge samples for volatile organics must be analyzed within 14 days of collection. Sludge samples for semivolatile organics, PCBs and pesticides must be extracted within 14 days of collection and analyzed within 40 days of extraction.

## (3) Additional Pollutant Identification

In addition to the priority pollutants, a reasonable attempt shall be made to identify and quantify the ten most abundant constituents of each fraction (excluding priority pollutants and unsubstituted aliphatic compounds) shown to be present by peaks on the total ion plots (reconstructed gas chromatograms) more than ten times higher than the

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adjacent background noise. Identification shall be attempted through the use of U.S. EPA/NIH computerized library of mass spectra, with visual confirmation by an experienced analyst. Quantification may be based on an order of magnitude estimate based upon comparison with an internal standard.

The annual program effectiveness review, required by Part III. A.7. of this permit, should identify the additional steps necessary to determine whether the pollutants that are present interfere, pass through, or otherwise violate 40 CFR 403.2. Upon such determination, the report must also identify the steps taken to develop and enforce local limitations on industrial discharges for those pollutants. This is a requirement of 40 CFR 403.5.

#### B. MONITORING AND REPORTING

## 1. Representative Sampling

Samples and measurements taken as required herein shall be representative of the volume and nature of the monitored discharge flow and shall be taken at times which reflect the full range of effluent parameters normally expected to be present. Samples shall not be taken at times to avoid showing elevated levels of any parameters.

# 2. Data on Plant Operation

The raw influent and the wastewater from intermediate unit treatment processes, as well as the final effluent shall be sampled and analyzed for the pollutants and operational parameters specified by the applicable Monthly Report of Operation Form, as appropriate, in accordance with 327 IAC 5-2-13. Except where the permit specifically states otherwise, the sample frequency for the raw influent and intermediate unit treatment process shall be at a minimum the same frequency as that for the final effluent. The measurement frequencies specified in each of the tables in Part I.A. of this permit are the minimum frequencies required by this permit.

# 3. Monthly Reporting

The permittee shall submit monitoring reports to the Indiana Department of Environmental Management containing results obtained during the previous month and shall be postmarked no later than the 28th day of the month following each completed monitoring period. The first report shall be submitted by the 28th day of the month following the month in which the permit becomes effective. These reports shall include, but not necessarily be limited to, the Discharge Monitoring Report, Form 30530 (the Indiana Monthly Monitoring Report form) and the Monthly Report of Operation. The Regional Administrator may request the permittee to submit monitoring reports to the Environmental Protection Agency if it is deemed necessary to assure compliance with the permit.

A calendar week will begin on Sunday and end on Saturday. Partial weeks consisting of four or more days at the end of any month will include the remaining days of the week, which occur

in the following month in order to calculate a consecutive seven-day average. This value will be reported as a weekly average or seven-day average on the MRO for the month containing the partial week of four or more days. Partial calendar weeks consisting of less than four days at the end of any month will be carried forward to the succeeding month and reported as a weekly average or a seven-day average for the calendar week that ends with the first Saturday of that month.

## 4. Definitions

#### a. Effluent Limitations

Pursuant to 327 IAC 5-2-11(a)(5), the calculation of the average of discharge data shall be determined as follows: For all parameters except fecal coliform and *E. coli*, calculations that require averaging of sample analyses or measurements of daily discharges shall use an arithmetic mean unless otherwise specified in this permit. For fecal coliform, the monthly average discharge and weekly average discharge, as concentrations, shall be calculated as a geometric mean. For *E. coli*, the monthly average discharge, as a concentration, shall be calculated as a geometric mean.

#### b. Terms

- (1) "Monthly Average" -The monthly average discharge means the total mass or flow-weighted concentration of all daily discharges during a calendar month on which daily discharges are sampled or measured, divided by the number of daily discharges sampled and/or measured during such calendar month. The monthly average discharge limitation is the highest allowable average monthly discharge for any calendar month.
- (2) "Weekly Average" The weekly average discharge means the total mass or flow weighted concentration of all daily discharges during any calender week for which daily discharges are sampled or measured, divided by the number of daily discharges sampled and/or measured during such calender week. The average weekly discharge limitation is the maximum allowable average weekly discharge for any calender week.
- (3) "Daily Maximum" The daily maximum discharge limitation is the maximum allowable daily discharge for any calendar day. The "daily discharge" means the total mass of a pollutant discharged during the calendar day or, in the case of a pollutant limited in terms other than mass pursuant to 327 IAC 5-2-11(e), the average concentration or other measurement of the pollutant specified over the calendar day or any twenty-four hour period that represents the calendar day for purposes of sampling.
- (4) A 24-hour composite sample consists of at least 6 individual flow-proportioned samples of wastewater, taken by the grab sample method over equal time intervals during the period of operator attendance or by an automatic sampler, which are taken

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at approximately equally spaced time intervals for the duration of the discharge within a 24-hour period and which are combined prior to analysis. A flow proportioned composite sample may be obtained by:

(a) recording the discharge flow rate at the time each individual sample is taken,

- (b) adding together the discharge flow rates recorded from each individual sampling time to formulate the "total flow value,"
- (c) dividing the discharge flow rate of each individual sampling time by the total flow value to determine its percentage of the total flow value, and
- (d) multiplying the volume of the total composite sample by each individual sample's percentage to determine the volume of that individual sample which will be included in the total composite sample.
- (5) CBOD<sub>5</sub>: Carbonaceous Biochemical Oxygen Demand
- (6) TSS: Total Suspended Solids
- (7) E. coli: Escherichia coli bacteria
- c. The "Regional Administrator" is defined as the Region V Administrator, U.S. EPA, located at 77 West Jackson Boulevard, Chicago, Illinois 60604.
- d. The "Commissioner" is defined as the Commissioner of the Indiana Department of Environmental Management, located at the following address: 100 North Senate Avenue, P.O. Box 6015, Indianapolis, Indiana 46206-6015.
- e. Limit of Detection or LOD means a measurement of the concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is greater than zero (0) for a particular analytical method and sample matrrix. The LOD is equivalent to the method detection level or MDL.
- f. Limit of Quantitation or LOQ means a measurement of the concentration of a contaminant obtained by using a specified laboratory procedure calibrated at a specified concentration about the method detection level. It is considered the lowest concentration at which a particular contaminant can be quantitatively measured using a specified laboratory procedure for monitoring of the contaminant. This term is also called the limit of quantification or quantification level.
- g. Method Detection Level or MDL means the minimum concentration of an analyte (substance) that can be measured and reported with a ninety-nine percent (99%) confidence that the analyte concentration is greater than zero (0) as determined by the procedure set forth in 40 CFR Part 136, Appendix B. The method detection level or MDL is equivalent to the LOD.

- h. TU<sub>c</sub> is defined as 100/NOEC or 100/IC<sub>25</sub>.
- i.  $TU_a$  is defined as  $100/LC_{50}$  where the  $LC_{50}$  is expressed as a percent effluent in the test medium of an acute whole effluent toxicity (WET) test that is statistically or graphically estimated to be lethal to fifty percent (50%) of the test organisms.
- j. "Inhibition concentration 25" or " $IC_{25}$ " means the toxicant concentration that would cause a twenty-five percent (25%) reduction in a nonquantal biological measurement for the test population. For example, the  $IC_{25}$  is the concentration of toxicant that would cause a twenty-five percent (25%) reduction in mean young per female or in growth for the test population.
- k. "No observed effect concentration" or "NOEC" is the highest concentration of toxicant to which organisms are exposed in a full life cycle or partial life cycle (short term) test, that causes no observable adverse effects on the test organisms, that is, the highest concentration of toxicant in which the values for the observed responses are not statistically significantly different from the controls.

## 5. Test Procedures

The analytical and sampling methods used shall conform to the current version of 40 CFR, Part 136. The approved methods may be included in the texts listed below. However, different but equivalent methods are allowable if they receive the prior written approval of the State agency and the U.S. Environmental Protection Agency. Where no test procedure under 40 CFR 136 has been approved, analytical work shall be conducted in accordance with the most recent edition of "Standard Methods for the examination of Water and Wastewater", published by the American Public Health Association (APHA) or as otherwise specified by the commissioner.

- a. <u>Standard Methods for the Examination of Water and Wastewater</u>
   18<sup>th</sup>, 19<sup>th</sup>, or 20<sup>th</sup> Editions, 1992, 1995 or 1998 American Public Health Association, Washington, D.C. 20005.
- b. A.S.T.M. Standards, Part 23, Water; Atmospheric Analysis 1972 American Society for Testing and Materials, Philadelphia, PA 19103.
- Methods for Chemical Analysis of Water and Wastes
   June 1974, Revised, March 1983, Environmental Protection
   Agency, Water Quality Office, Analytical Quality Control

Laboratory, 1014 Broadway, Cincinnati, OH 45202.

## 6. Recording of Results

For each measurement or sample taken pursuant to the requirements of this permit, the permittee shall record the following information:

- a. The exact place, date, and time of sampling;
- b. The person(s) who performed the sampling or measurements;
- c. The dates the analyses were performed;
- d. The person(s) who performed the analyses;
- e. The analytical techniques or methods used; and
- f. The results of all required analyses and measurements.

# 7. Additional Monitoring by Permittee

If the permittee monitors any pollutant at the location(s) designated herein more frequently than required by this permit, using approved analytical methods as specified above, the results of such monitoring shall be included in the calculation and reporting of the values required in the Monthly Discharge Monitoring Report and on the Monthly Report of Operation form. Such increased frequency shall also be indicated on these forms.

#### 8. Records Retention

All records and information resulting from the monitoring activities required by this permit, including all records of analyses performed and calibration and maintenance of instrumentation and recording from continuous monitoring instrumentation, shall be retained for a minimum of three (3) years. In cases where the original records are kept at another location, a copy of all such records shall be kept at the permitted facility. The three-year period shall be extended:

- automatically during the course of any unresolved litigation regarding the discharge of
  pollutants by the permittee or regarding promulgated effluent guidelines applicable to the
  permittee; or
- b. as requested by the Regional Administrator or the Indiana Department of Environmental Management.

## 9. <u>Discharge Monitoring Reports</u>

- a. For parameters with monthly average water quality-based effluent limitations (WQBELs) below the limit of quantitation (LOQ), daily effluent values that are less than the LOQ, used to determine the monthly average effluent levels less than the LOQ, may be assigned a value of zero (0), unless, after considering the number of monitoring results that are greater than the limit of detection (LOD), and applying appropriate statistical techniques, a value other than zero (0) is warranted.
- b. For all other parameters for which the monthly average WQBEL is equal to or greater than the LOQ, calculations that require averaging of measurements of daily values (both concentration and mass) shall use an arithmetic mean. When a daily discharge value is below the LOQ, a value of zero (0) shall be used for that value in the calculation to determine the monthly average unless otherwise specified or approved by the Commissioner.
- c. Effluent concentrations less than the LOD shall be reported on the Discharge Monitoring Report (DMR) forms as < (less than) the value of the LOD. For example, if a substance is not detected at a concentration of 0.1 Fg/l, report the value as < 0.1 Fg/l.
- d. Effluent concentrations greater than or equal to the LOD and less than the LOQ that are reported on a DMR shall be reported as the actual value and annotated on the DMR to indicate the value is not quantifiable.
- e. Mass discharge values which are calculated from concentrations reported as less than the value of the limit of detection shall be reported as less than the corresponding mass value.
- f. Mass discharge values that are calculated from effluent concentrations greater than the limit of detection shall be reported as the calculated value.

#### C. REOPENING CLAUSES

In addition to the reopening clause provisions cited at 327 IAC 5-2-16, the following reopening clauses are incorporated into this permit:

- This permit may be modified or, alternately, revoked and reissued after public notice and
  opportunity for hearing to incorporate effluent limitations reflecting the results of a wasteload
  allocation if the Department of Environmental Management determines that such effluent
  limitations are needed to assure that State Water Quality Standards are met in the receiving
  stream.
- 2. This permit may be modified due to a change in sludge disposal standards pursuant to Section 405(d) of the Clean Water Act, if the standards when promulgated contain different conditions, are otherwise more stringent, or control pollutants not addressed by this permit.
- 3. This permit may be modified, or, alternately, revoked and reissued, to comply with any applicable effluent limitation or standard issued or approved under section 301(b)(2)(C), (D) and (E), 304(b)(2), and 307(a)(2) of the Clean Water Act, if the effluent limitation or standard so issued or approved:
  - a. contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or
  - b. controls any pollutant not limited in the permit.
- 4 This permit may be modified, or alternately, revoked and reissued after public notice and opportunity for hearing to include whole effluent toxicity limitations or to include limitations for specific toxicants if the results of the biomonitoring and/or the TRE study indicate that such limitations are necessary.
- 5 This permit may be modified, or alternately, revoked and reissued, after public notice and opportunity for hearing, to include a case-specific Method Detection Level (MDL). The permittee must demonstrate that such action is warranted in accordance with the procedure specified under Appendix B, 40 CFR Part 136, or approved by the Indiana Department of Environmental Management.
- This permit may be modified or, alternatively, revoked and reissued after public notice and opportunity for hearing to incorporate effluent limitations for ultraviolet light intensity if the Department of Environmental Management determines that such effluent limitations are needed to assure that State Water Quality Standards are met in the receiving stream.

- 7. This permit may be modified or, alternatively, revoked and reissued after public notice and opportunity for hearing to incorporate additional requirements or limitations for specific toxicants if the required additional analyses in Part I.A.4. a. or b. indicate that such additional requirements and/or limitations are necessary to assure that State Water Quality Standards are met in the receiving stream.
- 8. This permit may be modified or revoked and reissued after public notice and opportunity for hearing to revise or remove the requirements of the pollutant minimization program (see Part I. D. of this permit), if supported by information generated as a result of the program.
- 9. This permit may be modified or revoked and reissued after public notice and opportunity for hearing to include more stringent monitoring requirements or conditions if new information generated as a result of accelerated monitoring conducted in accordance with 327 IAC 5-2-11.6(h)(4), or special conditions included in the permit in accordance with 327 IAC 5-2-11.6(h)(5) indicates the likely presence of the pollutant in the discharge at levels above the water quality-based effluent limit (WQBEL).
- 10. This permit may be modified or revoked and reissued after public notice and opportunity for hearing to specify the use of a different analytical method if a more sensitive analytical method has been specified in or approved under 40 CFR 136 or approved by the Commissioner to monitor for the presence and amount in the effluent of the pollutant for which the WQBEL is established. The permit shall specify, in accordance with 327 IAC 5-2-11.6(h)(2)(B), the LOD and LOQ that can be achieved by use of the specified analytical method.

#### D. POLLUTANT MINIMIZATION PROGRAM

Due to the fact that this permit contains water quality-based effluent limits for copper which is less than the listed LOQ value, the permittee is required to develop and conduct a pollutant minimization program (PMP) for copper.

- 1. The goal of the pollutant minimization program shall be to maintain the effluent at or below the WQBEL. The pollutant minimization program shall include, but is not limited to, the following:
  - a. Submit a control strategy designed to proceed toward the goal within 180 days of the effective date of this permit.
  - b. Implement appropriate cost-effective control measures, consistent with the control strategy within 365 days of the effective date of this permit.
  - c. Monitor as necessary to record the progress toward the goal.
  - d. Submit an annual status report to the IDEM at the address listed in Part I B.3.d. to the attention of the Office of Water Quality, Compliance Evaluation Section, by January 31 of each year. The report shall include the following information:
    - (1) All minimization program monitoring results for the previous year.
    - (2) A list of potential sources of the pollutant.
    - (3) A summary of all actions taken to reduce or eliminate the identified sources of the pollutant.
  - e. A pollutant minimization program may include the submittal of pollution prevention strategies that use changes in production process technology, materials, processes, operations, or procedures to reduce or eliminate the source of the pollutant.
- 2. No pollutant minimization program is required if the permittee demonstrates that the discharge of a pollutant with a WQBEL below the LOQ is reasonably expected to be in compliance with the WQBEL at the point of discharge into the receiving water. This demonstration may include, but is not limited to, the following:
  - a. Treatment information, including information derived from modeling the destruction of removal of the pollutant in the treatment process.
  - b. Mass balance information.

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- c. Fish tissue studies or other biological studies.
- 3. In determining appropriate cost-effective control measures to be implemented in a pollutant minimization program, the following factors may be considered:
  - a. Significance of sources.
  - b. Economic and technical feasibility.
  - c. Treatability.

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## E. CHRONIC BIOMONITORING PROGRAM REQUIREMENTS

The 1977 Clean Water Act explicitly states, in Section 101(3) that it is the <u>national policy that the discharge of toxic pollutants in toxic amounts be prohibited</u>. In support of this policy the U.S. EPA in 1995 amended the 40 CFR 136.3 (Tables IA and II) by adding testing methods for measuring acute and short-term chronic toxicity of whole effluents and receiving waters. To adequately assess the character of the effluent, and the effects of the effluent on aquatic life, the permittee shall conduct Whole Effluent Toxicity Testing. Part 1 of this section describes the testing procedures, Part 2 describes the Toxicity Reduction Evaluation which is only required if the effluent demonstrates toxicity, as described in paragraph f.

# 1. Whole Effluent Toxicity Tests

Within 180 days of the effective startup date of the 4.8 MGD plant, the permittee shall initiate the series of bioassay tests described below to monitor the toxicity of the discharge from Outfall 001.

- a. Bioassay Test Procedures and Data Analysis
  - (1) All test organisms, test procedures and quality assurance criteria used shall be in accordance with the Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Water to Freshwater Organisms; Third Edition Section 13, Cladoceran (Ceriodaphnia dubia) Survival and Reproduction Test Method 1002.0; and Section 11, Fathead Minnow (Pimephales promelas) Larval Survival and Growth Test Method, (1000.0) EPA 600-4-91-002, July 1994 or most recent update.
  - (2) Any circumstances not covered by the above methods, or that require deviation from the specified methods shall first be approved by the IDEM's Environmental Toxicology and Chemistry Section.
  - (3) The determination of effluent toxicity shall be made in accordance with the Data Analysis general procedures for acute and chronic toxicity endpoints as outlined in Section 9, and in Sections 11 and 13 of the respective Test Method (1000.0 and 1002.0) of Short-term Methods of Estimating the Chronic Toxicity of Effluent and Receiving Water to Freshwater Organisms (EPA-600-4-91-002), Fourth Edition, July 1994 or most recent update.

# b. Types of Bioassay Tests

The permittee shall conduct a 7-day Cladoceran (<u>Ceriodaphnia dubia</u>) Survival and Reproduction Test and a 7-day Fathead Minnow (<u>Pimephales promelas</u>) Larval Survival and Growth Test on samples of the final effluent.

All tests will be conducted on 24-hour composite samples of final effluent. All test solutions shall be renewed daily. On days three and five fresh 24-hour composite samples of the effluent collected on alternate days shall be used to renew the test solutions.

If, in any control, more than 10% of the test organisms die in 96 hours, or more than 20% of the test organisms die in 7 days, that test (control and effluent) shall be repeated. In addition, if in the <u>Ceriodaphnia</u> test the number of newborns produced per female or if 60% of females have less than three broods; and in the fathead minnow test if the mean dry weight in the control group is less than 25 mg, that test shall also be repeated. Such testing will determine whether the effluent affects the survival, reproduction, and/or growth of the test organisms. Results of all tests regardless of completion must be reported to IDEM.

## c. Effluent Sample Collection and Chemical Analysis

- (1) Samples taken for the purposes of Whole Effluent Toxicity Testing, will be at a point that is representative of the discharge but prior to discharge. The maximum holding time for whole effluent is 36 hours for a 24 hour composite sample. Bioassay tests must be started within 36 hours after termination of 24 hour composite sample collection. Bioassay of effluent sampling may be coordinated with other permit sampling requirements as appropriate to avoid duplication.
- (2) Chemical analysis must accompany each effluent sample taken for bioassay test. The analysis detailed under Part I.A. should be conducted for the effluent sample. Chemical analysis must comply with approved EPA test methods.

#### d. Testing Frequency and Duration

The chronic toxicity tests specified in paragraph b above shall be conducted monthly for a period of <u>three months</u> and, if no toxicity is demonstrated as defined in paragraph f, the permittee may reduce the number of species tested to only include the species demonstrated to be most sensitive to the toxicity in the effluent. The permittee shall conduct chronic toxicity testing once every year thereafter for the duration of this permit.

If toxicity is demonstrated as defined under paragraph 1.f, the permittee is required to conduct a toxicity reduction evaluation (TRE) as specified in Section 2.

## e. Reporting

- (1) Results shall be reported according to EPA 600/4-91-002, Section 10 (Report Preparation). Two copies of the completed report for each test shall be submitted to the Data Management Section of the IDEM <u>no later than sixty days after completion of</u> the test.
- (2) For quality control the report shall include the results of appropriate standard reference toxicant tests for acute and chronic endpoints and historical reference toxicant data with mean values and appropriate ranges for the respective test species <u>Ceriodaphnia dubia</u> and <u>Pimephales promelas</u>. Biomonitoring reports must also include copies of Chain-of-Custody Records and Laboratory raw data sheets.
- (3) Statistical procedures used to analyze and interpret toxicity data including critical values of significance used to evaluate each point of toxicity should be described and included as part of the biomonitoring report.

## f. Demonstration of Toxicity

- (1) Acute toxicity will be demonstrated if the effluent is observed to have exceeded 1.0 TU<sub>a</sub>(acute toxic units) based on 100% effluent for the test organism in 48 and 96 hours for <u>Ceriodaphnia dubia</u> or <u>Pimephales promelas</u>, which ever is more sensitive
- (2) Chronic toxicity will be demonstrated if the effluent is observed to have exceeded 1.2 TU<sub>c</sub> (chronic toxic units) for <u>Ceriodaphnia dubia</u> or <u>Pimephales promelas</u>.
- (3) If acute or chronic toxicity is found in any of the tests specified above, a confirmation toxicity test using the specified methodology and same test species shall be conducted within two weeks of the completion of the failed test to confirm results. If any two tests, including any and all confirmation tests, indicate the presence of toxicity, the permittee must begin the implementation of a Toxicity Reduction Evaluation (TRE) as described below. The whole effluent toxicity tests required above may be suspended while the TRE is being conducted.

## 2. Toxicity Reduction Evaluation (TRE) Schedule of Compliance

The development and implementation of a TRE (including any post-TRE biomonitoring requirements) is only required if toxicity is demonstrated as defined by Paragraph 1.f.

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# a. Development of TRE Plan

Within 90 days of determination of toxicity, the permittee shall submit plans for an effluent toxicity reduction evaluation (TRE) to the Data Management Section of the IDEM.

The TRE plan shall include appropriate measures to characterize the causative toxicants and the variability associated with these compounds. Guidance on conducting effluent toxicity reduction evaluations is available from EPA and from the EPA publications listed below:

(1) Methods for Aquatic Toxicity Identification Evaluations:

Phase I Toxicity Characterization Procedures, Second Edition (EPA/600/6-91/003), February 1991.

Phase II Toxicity Identification Procedures (EPA 600/3-88/035), February 1989.

Phase III Toxicity Confirmation Procedures (EPA/600/3-88/036), February 1989.

(2) Methods for Chronic Toxicity Identification

Phase I Characterization of Chronically Toxic Effluents EPA/600/6-91/005, June 1991.

- (3) Generalized Methodology for Conducting Industrial Toxicity Reduction Evaluations (EPA/600/2-88/070), March 1989.
- (4) Toxicity Reduction Evaluation Protocol for Municipal Wastewater Treatment Plants (EPA/600/2-88/062), April 1989.

#### b. Conduct the Plan

Within 30 days after submission of the TRE plan to the IDEM, the permittee must initiate an effluent TRE consistent with the TRE plan. Progress reports shall be submitted every 90 days to the Data Management and Compliance Evaluation Sections of the Office of Water Quality (OWQ) beginning 90 days after initiation of the TRE study.

#### c. Reporting

Within 90 days of the TRE study completion, the permittee shall submit to the Data Management and Compliance Evaluation Sections of the Office of Water Quality (OWQ)

the final study results and a schedule for reducing the toxicity to acceptable levels through control of the toxicant source or treatment of whole effluent.

## d. Compliance Date

The permittee shall complete items a, b, and c from Section 2 above and reduce the toxicity to acceptable levels as soon as possible but no later than three years after the date of determination of toxicity.

e. Post-TRE Biomonitoring Requirements (Only Required After Completion of a TRE)

After the TRE, the permittee shall conduct monthly toxicity tests with 2 or more species for a period of three months. Should three consecutive monthly tests demonstrate no toxicity, the permittee may reduce the number of species tested to only include the species demonstrated to be most sensitive to the toxicity in the effluent, and conduct chronic tests every six months for the duration of the permit.

If toxicity is demonstrated as defined in paragraph f after the initial three month period, testing must revert to a TRE as in Part 2 (TRE).

These tests shall be conducted in accordance with the procedures under the Whole Effluent Toxicity Testing Section above.

#### PART II

#### STANDARD CONDITIONS FOR NPDES PERMITS

#### A. GENERAL CONDITIONS

## 1. <u>Duty to Comply</u>

The permittee shall comply with all terms and conditions of this permit in accordance with 327 IAC 5-2-8(1) and all requirements of 327 IAC 5-2-8. Any permit noncompliance constitutes a violation of the Clean Water Act and IC 13 and is grounds for enforcement action or permit termination, revocation and reissuance, modification, or denial of a permit renewal application.

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit. The permittee may claim an affirmative defense to a permit violation if the circumstances of the noncompliance meet the criteria of an upset as defined in Part II.B.3 of this permit.

## 2. Duty to Mitigate

In accordance with 327 IAC 5-2-8(3), the permittee shall take all reasonable steps to minimize or correct any adverse impact to the environment resulting from noncompliance with this permit. During periods of noncompliance, the permittee shall conduct such accelerated or additional monitoring for the affected parameters, as appropriate or as requested by IDEM, to determine the nature and impact of the noncompliance.

#### 3. <u>Duty to Provide Information</u>

The permittee shall submit any information that the permittee knows or has reason to believe would constitute cause for modification or revocation and reissuance of the permit at the earliest time such information becomes available, such as plans for physical alterations or additions to the facility that:

- a. could significantly change the nature of, or increase the quantity of, pollutants discharged; or
- b. the Commissioner may request to evaluate whether such cause exists.

In accordance with 327 IAC 5-1-3(a)(5), the permittee must also provide any information reasonably requested by the Commissioner.

# 4. <u>Duty to Reapply</u>

If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must obtain and submit a renewal of this permit in accordance with 327 IAC 5-3-2(a)(2). It is the permittee's responsibility to obtain and submit the application. In accordance with 327 IAC 5-2-3(c), the owner of the facility or operation from which a discharge of pollutants occurs is responsible for applying for and obtaining the NPDES permit, except where the facility or operation is operated by a person other than an employee of the owner in which case it is the operator's responsibility to apply for and obtain the permit. The application must be submitted at least 180 days before the expiration date of this permit. This deadline may be extended if:

- a. permission is requested in writing before such deadline;
- b. IDEM grants permission to submit the application after the deadline; and
- c. the application is received no later than the permit expiration date.

As required under 327 IAC 5-2-3(g)(1) and (2), POTWs with design influent flows equal to or greater than one million (1,000,000) gallons per day and POTWs with an approved pretreatment program or that are to required to develop a pretreatment program, will be required to provide the results of whole effluent toxicity testing as part of their NPDES renewal application.

## 5. <u>Transfers</u>

In accordance with 327 IAC 5-2-8(4)(D), this permit is nontransferable to any person except in accordance with 327 IAC 5-2-6(c). This permit may be transferred to another person by the permittee, without modification or revocation and reissuance being required under 327 IAC 5-2-16(c)(1) or 16(e)(4), if the following occurs:

- a. the current permittee notified the Commissioner at least thirty (30) days in advance of the proposed transfer date.
- b. a written agreement containing a specific date of transfer of permit responsibility and coverage between the current permittee and the transferee (including acknowledgment that the existing permittee is liable for violations up to that date, and the transferee is liable for violations from that date on) is submitted to the Commissioner.

- c. the transferee certifies in writing to the Commissioner their intent to operate the facility without making such material and substantial alterations or additions to the facility as would significantly change the nature or quantities of pollutants discharged and thus constitute cause for permit modification under 327 IAC 5-2-16(d). However, the Commissioner may allow a temporary transfer of the permit without permit modification for good cause, e.g., to enable the transferee to purge and empty the facility's treatment system prior to making alterations, despite the transferee's intent to make such material and substantial alterations or additions to the facility.
- d. the Commissioner, within thirty (30) days, does not notify the current permittee and the transferee of the intent to modify, revoke and reissue, or terminate the permit and to require that a new application be filed rather than agreeing to the transfer of the permit.

The Commissioner may require modification or revocation and reissuance of the permit to identify the new permittee and incorporate such other requirements as may be necessary under the Clean Water Act or state law.

#### 6. Permit Actions

In accordance with 327 IAC 5-2-16(b) and 327 IAC 5-2-8(4), this permit may be modified, revoked and reissued, or terminated for cause, including, but not limited to, the following:

- a. Violation of any terms or conditions of this permit;
- b. Failure of the permittee to disclose fully all relevant facts or misrepresentation of any relevant facts in the application, or during the permit issuance process; or
- c. A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge controlled by the permittee (e.g., plant closure, termination of the discharge b connecting to a POTW, a change in state law or information indicating the discharge poses a substantial threat to human health or welfare).

Filing of either of the following items does not stay or suspend any permit condition: (1) a request by the permittee for a permit modification, revocation and reissuance, or termination, or (2) submittal of information specified in Part II.A.3 of the permit including planned changes or anticipated noncompliance.

The permittee shall submit any information that the permittee knows or has reason to believe would constitute cause for modification or revocation and reissuance of the permit at the earliest time such information becomes available, such as plans for physical alterations or additions to the permitted facility that:

- 1. could significantly change the nature of, or increase the quantity of, pollutants discharged; or
- 2. the commissioner may request to evaluate whether such cause exists.

## 7. Property Rights

Pursuant to 327 IAC 5-2-8(6) and 327 IAC 5-2-5(b), the issuance of this permit does not convey any property rights of any sort or any exclusive privileges, nor does it authorize any injury to persons or private property or an invasion of rights, any infringement of federal, state, or local laws or regulations. The issuance of the permit also does not preempt any duty to obtain any other state, or local assent required by law for the discharge or for the construction or operation of the facility from which a discharge is made.

# 8. Severability

In accordance with 327 IAC 1-1-3, the provisions of this permit are severable and, if any provision of this permit or the application of any provision of this permit to any person or circumstance is held invalid, the invalidity shall not affect any other provisions or applications of the permit which can be given effect without the invalid provision or application.

## 9. Oil and Hazardous Substance Liability

Nothing in this permit shall be construed to relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject to under Section 311 of the Clean Water Act.

# 10. State Laws

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable state law or regulation under authority preserved by Section 510 of the Clean Water Act or state law.

#### 11. Penalties for Violation of Permit Conditions

Pursuant to IC 13-30-4, a person who violates any provision of this permit, the water pollution control laws; environmental management laws; or a rule or standard adopted by the Water Pollution Control Board is liable for a civil penalty not to exceed twenty-five thousand dollars (\$25,000) per day of any violation. Pursuant to IC 13-30-5, a person who obstructs, delays, resists, prevents, or interferes with (1) the department; or (2) the department's personnel or designated agent in the performance of an inspection or investigation commits a class C infraction.

Pursuant to IC 13-30-6, a person who intentionally, knowingly, or recklessly violates any provision of this permit, the water pollution control laws or a rule or standard adopted by the Water Pollution Control Board commits a class D felony punishable by the term of imprisonment established under IC 35-50-2-7(a) (up to one year), and/or by a fine of not less than five thousand dollars (\$5,000) and not more than fifty thousand dollars (\$50,000) per day of violation. A person convicted for a violation committed after a first conviction of such person under this provision is subject to a fine of not more than one hundred thousand dollars (\$100,000) per day of violation, or by imprisonment for not more than two (2) years, or both.

# 12. Penalties for Tampering or Falsification

In accordance with 327 IAC 5-2-8(9), the permittee shall comply with monitoring, recording, and reporting requirements of this permit. The Clean Water Act, as well as IC 13-30-6-2 and IC 35-50-3-3, provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under a permit shall, upon conviction, be punished by a fine of not more than ten thousand dollars (\$10,000) per violation, or by imprisonment for not more than one hundred eighty (180) days per violation, or by both.

#### 13. Toxic Pollutants

If any applicable effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is established under Section 307(a) of the Clean Water Act for a toxic pollutant injurious to human health, and that standard or prohibition is more stringent than any limitation for such pollutant in this permit, this permit shall be modified or revoked and reissued to conform to the toxic effluent standard or prohibition in accordance with 327 IAC 5-2-8(5). Effluent standards or prohibitions established under Section 307(a) of the Clean Water Act for toxic pollutants injurious to human health are effective and must be complied with, if applicable to the permittee, within the time provided in the implementing regulations, even absent permit modification.

## 14. Operator Certification

The permittee shall have the wastewater treatment facilities under the direct supervision of an operator certified by the Commissioner in a classification corresponding to the classification of the wastewater treatment plant as required by IC 13-18-11-11 and 327 IAC 5-22.

In order to operate a wastewater treatment plant the operator shall have qualifications as established in 327 IAC 5-22-7. The permittee shall designate one (1) person shall be as the certified operator with complete responsibility for the proper operations of the wastewater facility.

327 IAC 5-22-10(b) provides that a certified operator may be designated as being in responsible charge of more than one (1) wastewater treatment plant, if it can be shown that he will give adequate supervision to all units involved. Adequate supervision means that sufficient time is spent at the plant on a regular basis to assure that the certified operator is knowledgeable of the actual operations and that test reports and results are representative of the actual operations conditions. In accordance with 327 IAC 5-22-3(10), "responsible charge" means the person responsible for the overall daily operation, supervision, or management of a wastewater facility.

Pursuant to 327 IAC 5-22-10(a), the permittee shall notify IDEM when there is a change of the person serving as the certified operator in responsible charge of the wastewater treatment facility. The notification shall be made no later than thirty (30) days after a change in the operator.

## 15. <u>Construction Permit</u>

Except in accordance with 327 IAC 3, the permittee shall not construct, install, or modify any water pollution treatment/control facility as defined in 327 IAC 3-1-2(24). Upon completion of any construction, the permittee must notify the Compliance Evaluation Section of the Office of Water Quality in writing.

#### 16. <u>Inspection and Entry</u>

In accordance with 327 IAC 5-2-8(7), the permittee shall allow the Commissioner, or an authorized representative, (including an authorized contractor acting as a representative of the Commissioner)upon the presentation of credentials and other documents as may be required by law, to:

- Enter upon the permittee's premises where a point source, regulated facility, or activity is located or conducted, or where records must be kept pursuant to the conditions of this permit;
- b. Have access to and copy, at reasonable times, any records that must be kept under the terms and conditions of this permit;
- Inspect at reasonable times any facilities, equipment or methods (including monitoring and control equipment), practices, or operations regulated or required pursuant to this permit;
   and
- d. Sample or monitor at reasonable times, any discharge of pollutants or internal wastestreams for the purposes of evaluating compliance with the permit or as otherwise authorized.

## 17. New or Increased Discharge of Pollutants

- a. This permit prohibits the permittee from undertaking any deliberate action that would result in a new or increased discharge of a bioaccumulative chemical of concern (BCC) or a new or increased permit limit for a pollutant or pollutant parameter that is not a BCC, unless one of the following is completed prior to the commencement of the action:
  - (1) Information is submitted to the Commissioner demonstrating that the proposed new or increased discharge will not cause a significant lowering of water quality as defined under 327 IAC 5-2-11.3(b)(1). Upon review of this information, the Commissioner may request additional information or may determine that the proposed increase is a significant lowering of water quality and require the submittal of an antidegradation demonstration.
  - (2) An antidegradation demonstration is submitted and approved in accordance with 327 IAC 5-2-11.3(b)(3) through (6).
- b. The permittee is prohibited from allowing a new or increased discharge of a BCC from (1) an existing industrial user proposing to increase or add a process wastestream; or (2) a proposed new industrial user which will have a process wastestream; where the process wastestream contains a bioaccumulative chemical of concern (BCC) at concentrations detectable using the most sensitive analytical method for the BCC contained in 40 CFR 136 or approved by the Commissioner, unless one (1) of the following is completed prior to commencement of the discharge:

- (1) Information is submitted to the Commissioner demonstrating that the proposed new or increased discharge will not cause a significant lowering of water quality as defined under 327 IAC 5-2-11.3(b)(1). Upon review of this information, the Commissioner may request additional information or may determine that the proposed increase is a significant lowering of water quality and require the submittal of an antidegradation demonstration.
- (2) An antidegradation demonstration is submitted and approved in accordance with 327 IAC 5-2-11.3(b)(3) through (6).
- c. Whether or not the permit contains a limitation for a BCC, if there is an increase in loading of a BCC, above normal variability and attributable to a deliberate action, the permittee shall notify the Commissioner of the increase unless either:
  - 1. the permittee has submitted the information required under 327 IAC 5-2-11.3(b)(2)(A)(i) for the increase; or
  - 2. an antidegradation demonstration for the increase has been approved under 327 IAC 5-2-11.3(b)(5).

If the increase is determined to be a significant lowering of water quality, as defined under 327 IAC 5-2-11.3(b)(1), the Commissioner shall require reduction or elimination of the increase.

d. If the permittee seeks to significantly lower water quality in a high quality water for any pollutant or pollutant parameter must first submit an antidegradation demonstration for consideration and approval by the Commissioner, in accordance with 327 IAC 5-2-11.3(b).

## B. MANAGEMENT REQUIREMENTS

## 1. Facility Operation, Maintenance and Quality Control

- a. In accordance with 327 IAC 5-2-8(8), the permittee shall at all times maintain in good working order and efficiently operate all facilities and systems (and related appurtenances) for collection and treatment that are:
  - (1) installed or used by the permittee; and
  - (2) necessary for achieving compliance with the terms and conditions of the permit.

Neither 327 IAC 5-2-8(8), nor this provision, shall be construed to require the operation of installed treatment facilities that are unnecessary for achieving compliance with the terms and conditions of the permit.

- b. The permittee shall operate the permitted facility in a manner which will minimize upsets and discharges of excessive pollutants. The permittee shall properly remove and dispose of excessive solids and sludges.
- c. The permittee shall provide an adequate operating staff which is duly qualified to carry out the operation, maintenance, and testing functions required to ensure compliance with the conditions of this permit.
- d. Maintenance of all waste collection, control, treatment, and disposal facilities shall be conducted in a manner that complies with the bypass provisions set forth below.
- e. Any extensions to the sewer system must continue to be constructed on a separated basis. Plans and specifications, when required, for extension of the sanitary system must be submitted to the Facility Construction Section, Office of Water Quality in accordance with 327 IAC 3-2-1. There shall also be an ongoing preventative maintenance program for the sanitary sewer system.

## 2. Bypass of Treatment Facilities

Pursuant to 327 IAC 5-2-8(11):

- a. Terms as defined in 327 IAC 5-2-8(11)(A):
  - (1) "Bypass" means the intentional diversion of a waste stream from any portion of a

treatment facility.

- (2) "Severe property damage" means substantial physical damage to property, damage to the treatment facilities which would cause them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.
- b. Bypasses, as defined above, are prohibited, and the Commissioner may take enforcement action against a permittee for bypass, unless:
  - (1) The bypass was unavoidable to prevent loss of life, personal injury, or severe property damage, as defined above;
  - (2) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass that occurred during normal periods of equipment downtime or preventive maintenance; and
  - (3) The permittee submitted notices as required under Part II.B.2.d; or
  - (4) The condition under Part II.B.2.f below is met.
- c. Bypasses are subject to the "Spill Response and Reporting Requirements" in Part II.C.9 of this permit.
- d. The permittee must provide the Commissioner with the following notice:
  - (1) If the permittee knows or should have known in advance of the need for a bypass (anticipated bypass), it shall submit prior written notice. If possible, such notice shall be provided at least ten (10) days before the date of the bypass for approval by the Commissioner.
  - (2) The permittee shall orally report an unanticipated bypass within 24 hours of becoming aware of the bypass event. The permittee must also provide a written report within five (5) days of the time the permittee becomes aware of the bypass event. The written report must contain a description of the noncompliance (i.e. the bypass) and its cause; the period of noncompliance, including exact dates and times; if the cause of

noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate and prevent recurrence of the bypass event.

- e. The Commissioner may approve an anticipated bypass, after considering its adverse effects, if the Commissioner determines that it will meet the conditions listed above in Part II.B.2.b. The Commissioner may impose any conditions determined to be necessary to minimize any adverse effects.
- f. The permittee may allow any bypass to occur that does not cause a violation of the effluent limitations in the permit, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of Part II.B.2.b.,d and e of this permit.

## 3. <u>Upset Conditions</u>

Pursuant to 327 IAC 5-2-8(12):

- a. "Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.
- b. An upset shall constitute an affirmative defense to an action brought for noncompliance with such technology-based permit effluent limitations if the requirements of Paragraph c of this subsection, are met.
- c. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs or other relevant evidence, that:
  - (1) An upset occurred and the permittee has identified the specific cause(s) of the upset, if possible;
  - (2) The permitted facility was at the time being operated in compliance with proper operation and maintenance procedures;
  - (3) The permittee complied with any remedial measures required under "Duty to Mitigate", Part II.A.2; and

(4) The permittee submitted notice of the upset as required in the "Twenty-Four Hour Reporting Requirements," Part II.C.3, or the "Spill Response and Reporting Requirements," Part II.C.9, whichever is applicable.

#### 4. Removed Substances

Solids, sludges, filter backwash, or other pollutants removed from or resulting from treatment or control of wastewaters shall be disposed of in a manner such as to prevent any pollutant from such materials from entering waters of the State and to be in compliance with all Indiana statutes and regulations relative to liquid and/or solid waste disposal.

- a. Collected screenings, slurries, sludges, and other such pollutants shall be disposed of in accordance with provisions set forth in 329 IAC 10, 327 IAC 6.1, or another method approved by the Commissioner.
- b. The permittee shall comply with existing federal regulations governing solids disposal, and with applicable provisions of 40 CFR Part 503, the federal sludge disposal regulation standards.
- c. The permittee shall notify the Commissioner prior to any changes in sludge use or disposal practices.
- d. The permittee shall maintain records to demonstrate its compliance with the above disposal requirements.

## 5. Power Failures

In accordance with 327 IAC 5-2-10 and 327 IAC 5-2-8(13) in order to maintain compliance with the effluent limitations and prohibitions of this permit, the permittee shall either:

- a. provide an alternative power source sufficient to operate facilities utilized by the permittee to maintain compliance with the effluent limitations and conditions of this permit, or
- b. shall halt, reduce or otherwise control all discharge in order to maintain compliance with the effluent limitations and conditions of this permit upon the reduction, loss, or failure of one or more of the primary sources of power to facilities utilized by the permittee to maintain compliance with the effluent limitations and conditions of this permit.

## C. REPORTING REQUIREMENTS

## 1. Planned Changes in Facility or Discharge

Pursuant to 327 IAC 5-2-8(10)(F) and 5-2-16(d), the permittee shall give notice to the Commissioner as soon as possible of any planned alterations or additions to the facility (which includes any point source) that could significantly change the nature of, or increase the quantity of, pollutants discharged. Following such notice, the permit may be modified to revise existing pollutant limitations and/or to specify and limit any pollutants not previously limited. Material and substantial alterations or additions to the permittee's operation that were not covered in the permit (e.g., production changes, relocation or combination of discharge points, changes in the nature or mix of products produced) are also cause for modification of the permit. However those alterations which constitute total replacement of the process or the production equipment causing the discharge converts it into a new source, which requires the submittal of a new NPDES application.

# 2. Monitoring Reports

Pursuant to 327 IAC 5-2-8(9), 327 IAC 5-2-13, and 327 IAC 5-2-15, monitoring results shall be reported at the intervals and in the form specified in "Data On Plant Operation", Part I.B.2.

## 3. Twenty-Four Hour Reporting Requirements

Pursuant to 327 IAC 5-2-8(10), the permittee shall orally report to the Commissioner information on the following types of noncompliance within 24 hours from the time permittee becomes aware of such noncompliance. If the noncompliance meets the requirements of item b (Part II.C.3.b) or the Spill Response and Reporting Requirements of Part II.C.9 of this permit, then the report shall be made within those prescribed time frames.

- a. Any unanticipated bypass which exceeds any effluent limitation in the permit;
- b. Any noncompliance which may pose a significant danger to human health or the environment. Reports under this item shall be made as soon as the permittee becomes aware of the noncomplying circumstances by calling 317/233-7745 (888/233-7745 toll free in Indiana);
- c. Any upset (as defined in Part II.B.3 above) that exceeds any technology-based effluent limitations in the permit;

- d. The presence of foam in the discharge in more than trace amounts;
- e Any discharge from the sanitary sewer system;
- f. Violation of a maximum daily discharge limitation for any of the following toxic pollutants: mercury and copper

The permittee can make the oral reports by calling 317/232-8670 during regular business hours or by calling 317/233-7745 (888/233-7745 toll free in Indiana) during non-business hours. A written submission shall also be provided within five (5) days of the time the permittee becomes aware of the circumstances. The written submission shall contain: a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and, if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce and eliminate the noncompliance and prevent its recurrence. The Commissioner may waive the written report on a case-by-case basis if the oral report has been received within 24 hours. Alternatively the permittee may submit a "Bypass Overflow/Incident Report" or a "Noncompliance Notification Report", whichever is applicable, to IDEM at 317/232-8637. If a complete fax submittal is sent within 24 hours of the time that the permittee became aware of the occurrence, then the fax report will satisfy both the oral and written reporting requirements.

# 4. Other Noncompliance

Pursuant to 327 IAC 5-2-8(10)(D), the permittee shall report any instance of noncompliance not reported under the "Twenty-Four Hour Reporting Requirements" in Part II.C.3, not related to the failure to report planned changes in the permitted facility, or not relating to any compliance schedules at the time the pertinent Discharge Monitoring Report is submitted. The written submission shall contain: a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and, if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate and prevent the noncompliance.

#### 5. Other Information

Pursuant to 327 IAC 5-2-8(10)(E), where the permittee becomes aware that it failed to submit any relevant facts or submitted incorrect information in a permit application or in any report to the Commissioner, the permittee shall promptly submit such facts or corrected information to the Commissioner.

#### 6. <u>Signatory Requirements</u>

Pursuant to 327 IAC 5-2-22 and 327 IAC 5-2-8(14):

a. All reports required by the permit and other information requested by the Commissioner

shall be signed and certified by a person described below or by a duly authorized representative of that person:

- (1) For a corporation: by a principal executive defined as a president, secretary, treasurer, any vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy-making functions for the corporation or the manager of one or more manufacturing, production, or operating facilities employing more than two hundred fifty (250) persons or having gross annual sales or expenditures exceeding twenty-five million dollars (\$25,000,000) (in second quarter 1980 dollars), if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.
- (2) For a partnership or sole proprietorship: by a general partner or the proprietor, respectively; or
- (3) For a federal, state, or local governmental body or any agency or political subdivision thereof: by either a principal executive officer or ranking elected official.
- b. A person is a duly authorized representative only if:
  - (1) The authorization is made in writing by a person described above.
  - (2) The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as the position of plant manager, operator of a well or a well field, superintendent, or position of equivalent responsibility. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.); and
  - (3) The authorization is submitted to the Commissioner.
- c. <u>Certification</u>. Any person signing a document identified under paragraphs a and b of this section, shall make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

# 7. Availability of Reports

Except for data determined to be confidential under 327 IAC 12.1, all reports prepared in accordance with the terms of this permit shall be available for public inspection at the offices of the Indiana Department of Environmental Management and the Regional Administrator. As required by the Clean Water Act, permit applications, permits, and effluent data shall not be considered confidential.

## 8. Penalties for Falsification of Reports

IC 13-30 and 327 IAC 5-2-8(14) provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or noncompliance, shall, upon conviction, be punished by a fine or not more than \$10,000 per violation, or by imprisonment for not more than 180 days per violation, or by both.

# 9. Spill Response and Reporting Requirements

The permittee is required to comply with all spill response and reporting requirements set forth in 327 IAC 2-6.1, including 327 IAC 2-6.1-7. The permittee is required to communicate a spill report for any spill as defined in 327 IAC 2-6.1-4(15) that meets the criteria in 327 IAC 2-6.1-5 as soon as possible, but no later than two (2) hours after the permittee becomes aware of the occurrence. The spill report must be communicated to IDEM's Office of Land Quality, Emergency Response Section at 317/233-7745 or 888/233-7745 (toll-free within Indiana).

The reporting requirements of 327 IAC 2-6.1 do not apply to those discharges or exceedances that are under the jurisdiction of an applicable permit when the substance in question is covered by the permit and death or acute injury or illness to animals or humans does not occur. In order for a discharge or exceedance to be under the jurisdiction of this NPDES permit, the substance in question (a) must have been discharged in the normal course of operation from an outfall listed in this permit, and (b) must have been discharged from an outfall for which the permittee has authorization to discharge that substance.

## 10. <u>Progress Reports</u>

In accordance with 327 IAC 5-2-8(10)(A), reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than fourteen (14) days following each schedule date.

## 11. Advance Notice for Planned Changes

In accordance with 327 IAC 5-2-8(10)(B), the permittee shall give advance notice to IDEM of any planned changes in the permitted facility, any activity, or other circumstances that the permittee has reason to believe may result in noncompliance with permit requirements.

## 12. Additional Requirements for POTWs and/or Treatment Works Treating Domestic Sewage

- a. All POTWs shall identify, in terms of character and volume of pollutants, any significant indirect discharges into the POTW which are subject to pretreatment standards under section 307(b) and 307 (c) of the CWA.
- b. All POTWs must provide adequate notice to the Commissioner of the following:
  - (1) Any new introduction of pollutants into the POTW from an indirect discharger that would be subject to section 301 or 306 of the CWA if it were directly discharging those pollutants.
  - (2) Any substantial change in the volume or character of pollutants being introduced into that POTW by any source where such change would render the source subject to pretreatment standards under section 307(b) or 307(c) of the CWA or would result in a modified application of such standards.

As used in this clause, "adequate notice" includes information on the quality and quantity of effluent introduced into the POTW, and any anticipated impact of the change on the quantity or quality of the effluent to be discharged from the POTW.

- c. This permit incorporates any conditions imposed in grants made by the U.S. EPA and/or IDEM to a POTW pursuant to Sections 201 and 204 of the Clean Water Act, that are reasonably necessary for the achievement of effluent limitations required by Section 301 of the Clean Water Act.
- d. This permit incorporates any requirements of Section 405 of the Clean Water Act governing the disposal of sewage sludge from POTWs or any other treatment works treating domestic sewage for any use for which rules have been established in accordance with any applicable rules.
- e. POTWs must develop and submit to the Commissioner a POTW pretreatment program when required by 40 CFR 403 and 327 IAC 5-19-1, in order to assure compliance by industrial users of the POTW with applicable pretreatment standards established under Sections 307(b) and 307(c) of the Clean Water Act. The pretreatment program shall meet the criteria of 327 IAC 5-19-3 and, once approved, shall be incorporated into the POTW's NPDES permit.